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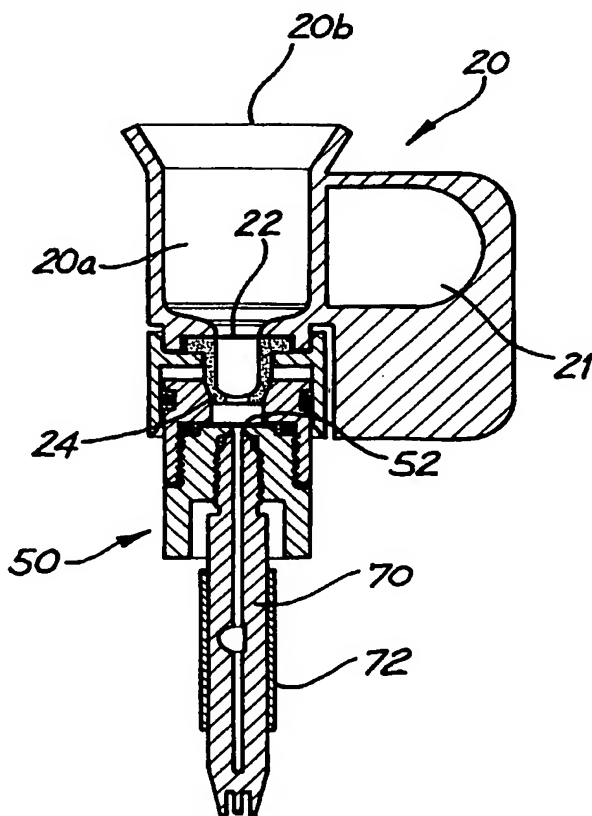
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(54) Title: APPARATUS FOR DISPENSING AND PRINTING FLUIDS



(57) Abstract: A piezoelectric dispensing apparatus (10) includes a piezoelectric dispensing device (20) including a fluid reservoir (20a) and a piezoelectric dispensing tube (70). The apparatus includes a seat for receiving the device and a plunger which is shaped and configured to abut with and seal the top of the reservoir and which defines a through bore to permit the application of vacuum and or pressure to the reservoir through the bore. The plunger may be moved up and down towards and away from the seat. The fluid reservoir defines an open top and an outlet at the base of the reservoir closed by a filter. The base of the reservoir define a foot. A secondary filter assembly is attachable to the base of the reservoir. The secondary filter assembly defines a bore which is in fluid communication with the reservoir when the secondary filter assembly is attached thereto. The secondary filter assembly also defines means for removably attaching the piezoelectric dispensing tube in fluid communication with the bore. The device includes a ducks bum valve or septum for closing the outlet of the reservoir until the reservoir is attached to the removable secondary filter assembly.

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